

**DRAFT**

**ULSS 002394-15**

---

**USER'S LOGISTICS SUPPORT SUMMARY**

**DATA NETWORK, GATEWAY**

**NSN: 5895-01-467-7469**



MARINE CORPS SYSTEMS COMMAND  
QUANTICO, VA 22134-5010

THIS PUBLICATION IS REQUIRED FOR OFFICIAL USE OR ADMINISTRATION OR OPERATIONAL PURPOSES. DISTRIBUTION IS LIMITED TO U.S. GOVERNMENT AGENCIES ONLY. OTHER REQUESTS FOR THIS DOCUMENT MUST BE REFERRED TO: COMMANDANT OF THE MARINE CORPS (ARD), WASHINGTON, DC 20380-0001

DESTRUCTION NOTICE: FOR UNCLASSIFIED, LIMITED DOCUMENTS, DESTROY BY ANY METHOD THAT WILL PREVENT DISCLOSURE OF CONTENTS OR RECONSTRUCTION OF THE DOCUMENTS.

---

**FOR OFFICIAL USE ONLY**

**JUNE 2001**  
**PCN 132 XXXXXX XX**



DEPARTMENT OF THE NAVY  
Headquarters, U.S. Marine Corps  
Washington, DC 20380-0001

June 2001

1. This User's Logistics Support Summary (ULSS), authenticated for Marine Corps use and effective upon receipt, advises the Fleet Marine Force (FMF) and other selected commands of the plan to field and logistically support the Data Network, Gateway, AN/TSQ-222, 5895-01-467-7469.
2. Submit notice of discrepancies or suggested changes to this ULSS to: Commander, MARCORSYSCOM, Attn: Program Manager (C4ISR COMM), 2033 Barnett Ave, Suite 315, Quantico, Virginia 22134-5010. In addition, forward an information copy to Program Support (PSL) at the same address.
3. This ULSS supercedes LAP 23-94 of 26 April 1999.
4. This ULSS is applicable to the Marine Corps Reserve.

BY DIRECTION OF THE COMMANDER, MARINE CORPS SYSTEMS COMMAND

OFFICIAL:

Wayne E. Briggs  
Lieutenant Colonel, USMC  
Program Manager, Communications Systems  
Marine Corps Systems Command

DISTRIBUTION: PCN 132 XXXX XXXX

1. Introduction. The Tactical Data Network (TDN) will augment the existing Marine Air- Ground Task Force (MAGTF) tactical communications infrastructure to provide the MAGTF Commander an integrated data network. This data network will support MAGTF Tactical Data Systems (TDSs) and the Defense Message System (DMS) by providing a network of communication nodes (gateways and servers) interconnected with one another and their subscribers via a combination of common user longhaul transmission systems, Local Area Networks (LANs), the Enhanced Position Location Reporting System (EPLRS), and switching telephone systems. This system will provide its subscribers with basic data transfer and switching services; access to strategic, supporting base, joint, and other service component data networks; network management capabilities; and value-added services, such as message handling, directory services, file sharing, and terminal emulation support. In addition, the TDN system will provide Marine Corps tactical users the infrastructure to support the transition from the Automated Digital Network (AUTODIN) to the mandated replacement system, DMS.

The TDN Gateway will be the normal connection point between a MAGTF's internal data network and external networks operated by the Defense Information Systems Agency (DISA), a Joint Task Force (JTF) headquarters, and other JTF component headquarters. As the center of each Marine Expeditionary Force (MEF) and Major Subordinate Command's (MSC's) LAN, each gateway will provide standard LAN systems (i.e., server platforms and software). The TDN system is comprised of two configurations: the TDN Gateway and the TDN Server. The TDN Gateway will be deployed at the MEF and MSC levels and will provide access to the Non-Secure Internet Protocol Router Network (NIPRNET), Secure Internet Protocol Router Network (SIPRNET), and other services' tactical packet switched networks.

a. Source of Requirement. United States Marine Corps (USMC) Operational Requirements Document (ORD) dated 1 Aug 1995, change 1, dated 13 Jan 1997; change 2, dated 10 Feb 1997; change 3, dated 3 Jul 1997; change 4, dated 12 Aug 1997; change 5, dated 23 Apr 1998; and change 6, dated 2 Jun 2000, describes the operational requirement for a material solution to augment the existing communications infrastructure and provide the commander with an integrated, standardized, and interoperable data network, forming the communications backbone for MAGTF's TDSs.

b. Points of Contact

TITLE

Program Manager

COMMAND

MARINE CORPS SYSTEMS COMMAND  
(C4I COMM)  
2033 BARNETT AVE, SUITE 315  
QUANTICO, VA 22134-5010  
DSN: 278-0705  
COML: (703) 784-0705

Project Officer	MARINE CORPS SYSTEMS COMMAND (C4I COMM) 2033 BARNETT AVE, SUITE 315 QUANTICO, VA 22134-5010 DSN: 278-0926 COML: (703) 784-0931
Integrated Logistics Support Officer	MARINE CORPS SYSTEMS COMMAND (C4I COMM-R) 2033 BARNETT AVE, SUITE 315 QUANTICO, VA 22134-5010 DSN: 278-0943 COML: (703) 784-0943
Weapons System Manager/ Warranty Coordinator	MARINE CORPS LOGISTICS BASES ATTN: 847-3 814 RADFORD BLVD ALBANY GA 31704-5000 DSN 567-6524/5 COML (229) 639-6524/5
Weapon Systems Support Activity	MARINE CORPS TACTICAL SYTEMS SUPPORT ACTIVITY BOX 555171 CAMP PENDLETON, CA 92055-5171 DSN: 365-9513 COML: (760) 725-9513

c. System Description. The TDN Gateway will have the processing capacity, switching capacity, software, and connectivity required to simultaneously support Sensitive-but-Unclassified (SBU) through TOP SECRET (TS) data communications nodes at the MEF and Major Subordinate Command (MSC) headquarters level. Until Multi-Level Security (MLS) is available, it is acceptable for multi-level classified operations to be performed independently or through the use of an approved Inline Network Encryptor (INE) or by both means. MLS will be provided in a future upgrade to the TDN at the gateway level and, if required, under Multi-level Information System Security Initiative (MISSI) architecture under development by the National Security Agency (NSA) at the server level.

The TDN Gateway consists of two M1097A1, Heavy-variant High Mobility Multipurpose Wheeled Vehicles (H-HMMWVs), a mounted S-788/G shelter, a Modular Command Post Shelter (MCPS) to include Bootwall Assembly, and two environmental control units (ECUs).

(1) Transport Mode. In the transport mode, the TDN Gateway will consist of two

H-HMMWVs. One H-HMMWV will have the S-788/G shelter mounted on it, which will contain the TDN Gateway. The H-HMMWV with mounted S-788/G shelter and MCPS with Bootwall Assembly will comprise the operational TDN Gateway configuration. The TDN Gateway equipment consists of multi-protocol routers, Marine Common Hardware Suite (MCHS) computers, LAN switches, interface connections to external systems, and communications security equipment. The TDN Gateway also contains patch panels, cables, and other interfaces necessary for communications links. Electrical power protection is provided by an uninterruptable power supply (UPS). The second H-HMMWV will be used to transport a number of TDN ancillary items.

(2) Operational Mode. The TDN Gateway will consist of the H-HMMWV with S-788/G mounted shelter and the MCPS with Bootwall Assembly. The shelter will contain TDN Gateway equipment, while the MCPS will provide a workspace for the DMS, MEF, or MSC level Area Control Center (ACC).

d. Operational Characteristics. The TDN Gateway and servers function as the primary data switching system for Internet Protocol (IP) traffic within the MAGTF and will interconnect all end-user TDSs and LANs into a seamless tactical internet. It will also internetwork deployed MAGTFs within-theater joint information systems, strategic level defense networks, and depending on the data network or information domain, the global Internet. The TDN Gateway can be viewed as a wide area network (WAN) that provides the infrastructure for TDN Servers. TDN Gateways can connect with other gateways and TDN Servers, which will form the communications backbone for the MAGTF.

(1) There are two operational scenarios for the TDN Gateway to support USMC operations:

(a) The first scenario occurs when the MEF begins to establish communications and before the Digital Technical Control (DTC) is present. The TDN Gateway has the capability to connect to the DISA network via the TDN transmission resource controller or via dedicated point to point circuits with the MAGTF internal data network and other external networks.

(b) The second scenario occurs when the TDN Gateway, TDN Server, and DTC are present. TDN Servers will connect to the user through one of four TDN supplied Ethernet switches. The TDN Server(s) will connect to the appropriate enclave of the TDN Gateway. The TDN Gateway will communicate with the DTC via a variety of means. The primary method is to communicate via the transmission resource controllers. Through the DTC, connectivity will be established between the MAGTF's internal data network, the DISA, the JTF Headquarters, and other service component networks. This is the preferred method.

(c) Military Occupational Specialty (MOS) 4066 (0651/0661) with a secondary MOS of 4068 (0668) will operate the TDN Gateway.

(2) The TDN Gateway will be deployed at the MEF and MSC levels and provide access to the NIPRNET, SIPRNET, and other services' tactical packet switched networks. Within the gateway there

are two separate suites of equipment for NIPRNET and SIPRNET connectivity. Within each suite of equipment, the TDN Gateway has three major functional components: the router network component, processor and software component, and support component.

(a) Router Network Components. The router network components include the routers, transmission resource controller, media converters, cryptographic equipment, and wireline adapters.

(b) Processor and Software Components. The processor and software components consist of the TDN processor, peripherals, and software loaded to the TDN processor. This software includes the network management software, system administration (including operating system) software, network services, and messaging to include DMS components.

(c) Support Components. The support components are those that protect other components from the environment and handling by the user such as the H-HMMWV with mounted S-788/G shelter, MCPS with Bootwall Assembly, power panels, UPS, patch panels, patch cords, and other components not previously covered.

(3) The TDN Operational Requirements Document (ORD) requires supporting the following users and TDSs:

- (a) Intelligence Analysis System (IAS)
- (b) Tactical Combat Operations (TCO)
- (c) Position Location Reporting System (PLRS)
- (d) Marine Integrated Personnel System (MIPS)
- (e) Marine Integrated Logistics System (MILOG)
- (f) Marine Combat Service Support Command and Control System (MCSSC2)
- (g) Initial Fire Support Automation System (IFSAS)
- (h) Advanced Field Artillery Tactical Data System (AFATDS)
- (i) Advanced Tactical Air Command Control (ATACC)
- (j) Improved Direct Air Support Central (IDASC)
- (k) System Planning Engineering Evaluation Device (SPEED)
- (l) MAGTF Tactical Warfare Simulation (MTWS)
- (m) Enhanced Position Location Reporting System (EPLRS)

e. Replaced Weapon Systems and Equipment. The TDN Gateway is a new requirement.

2. Administrative Informationa. Nomenclature. AN/TSQ-222b. TAMCN. A25357GPc. SAC. 3d. NSN. 5895-01-467-7469e. ID. 10666Af. UI. EAg. UC. \$428,507.00

h. Support Costs. The estimated annual support cost is \$33,640.00 in Operations and Maintenance Marine Corps (O&MMC) per system.

i. Physical Characteristics

	OPERATIONAL CONFIGURATION	STORAGE AND SHIPPING CONFIGURATION
<b>Length</b>	190.5 in.	190.5 in.
<b>Width</b>	86 in.	86 in.
<b>Height</b>	104 in.	104 in.
<b>Square</b>	113.77 sq. ft.	113.77 sq. ft.
<b>Cube</b>	986.01 cu. ft.	986.01 cu. ft.
<b>Weight</b>	9868 lbs.	9302 lbs.
<b>Stowage</b>	986.01 cu. ft.	986.01 cu. ft.

j. POL. N/Ak. Equipment Density. Low Density.

l. Resource Reporting. The TDN Gateway will be a candidate for Marine Corps Ground Equipment Resource Reporting (MCGERR) once the system is fully fielded per the current edition of MCBul 3000.

m. Power Requirements. Standard Marine Corps mobile electric power units will satisfy normal power requirements. The TDN Gateway uses 5-wire, 3-phase, 208 VAC Wye, 60 Hz power with a minimum of 20 amps per phase input for normal operations. While operating in a garrison environment the gateway will



use standard 60 Hz, 110 volts, of AC power. The TDN Gateway will utilize the camp power grid when deployed.

n. Associated Weapon Systems and Equipment. The associated equipment utilized with the TDN Gateway and provided to units with the fielding of the TDN Gateway is identified in Table 1 below. The TDN Gateway will interface with the tactical communication systems identified in Table 2.

Table 1. Associated Equipment with the TDN Gateway

NOMENCLATURE	NSN/ PART NUMBER	QTY	TAMCN
Air Conditioner, Vertical, Compact, F18T-MPI	4120-01-325-7062	2	B0012
Loop Encryption Device (LED), KIV-7HS w/Wireline Adapter, WLA-7	5810-01-431-8264	16	A8084
Digital Subscriber Voice Terminal (DSVT), TSEC/KY-68	5810-01-082-8404	4	A8083
Trunk Encryption Device (TED), KIV-19	5810-01-449-7179	2	A8085
H-HMMWV, M1097-A1	2320-01-346-9317	2	D0187
Modular Command Post System (MCPS) Tent	8340-01-323-2454	1	N/A
Bootwall Assembly	8340-01-364-4497	1	N/A
Test Set, Telecommunications, BIT w/Breakout Box	6625-01-380-3788	1	H7029
Analyzer, WAN	6625-01-428-9181	1	A7083
Secure Terminal Equipment (STE) Office	5810-01-457-0292	4	N/A
Tactical Fiber Optic Bulkhead Connector #107	A3102750	24	N/A
Skid Mounting Assy, Remote, Air Conditioning, SM-V18	4120-00-327-5035	2	B2004

Table 2. Tactical Communication Systems Interfaces

NOMENCLATURE	NSN	TAMCN
Digital Technical Control Facility	5895-01-467-7213	A0499
Data Network, Server	5895-01-467-6942	A2538
Automatic Telephone Central Office, AN/TTC-42	5805-01-188-3993	A0248
Automatic Telephone Switchboard, SB-3865	5805-01-187-9399	A2508
Satellite Communications Terminal (SATCOM), AN/TSC-85B	5895-01-284-8305	A0812
SATCOM Terminal, AN/TSC-93B	5895-01-284-8306	A0814
Radio Terminal Set, AN/MRC-142	5895-01-333-3040	A1955
Troposcatter Radio Set, AN/TRC-170	5895-01-354-7601	A2179
Tactical Fiber Optic Cable, CX-13295	6020-01-220-5435	H3458
TROJAN SPIRIT II, AN/TSQ-190	5895-01-379-0125	A3235
TRIBAND SATCOM Terminal, AN/TSC-156	5895-01-454-5365	A0818
SMART-T MILSTAR SATCOM Terminal, AN/TSC-154	5895-01-435-0571	A3232

NOMENCLATURE	NSN	TAMCN
EPLRS Radio Set, AN/VSQ-2C(V)1	5820-01-342-0506	A2152

### 3. Fielding Methodology

a. General Fielding Plan. The TDN Gateway will be fielded vertically. Initial Operating Capability (IOC) will be achieved during second quarter FY-02, once a sufficient number of personnel have been trained to support I MEF. The TDN Gateway is a Category 1, Level 3 system fielding under the Total Package Fielding method in accordance with Technical Manual (TM) 4420-15/1.

(1)List of Allowances and Delivery Schedule. See Appendix A.

(2)Schedule of Events. See Appendix B.

b. Method of Fielding. The TDN Gateway and support equipment will be force fed to gaining commands with the first systems being fielded to Marine Corps Tactical Systems Support Activity (MCTSSA) and Marine Corps Communication-Electronics School (MCCES) in the third quarter of FY01.

#### c. Fielding Responsibilities

(1) Gaining Commands. The gaining command is responsible for provision of the fielding facility/facilities, in addition to applicable services and security commensurate with the fielding effort for the command. These facilities and services include:

(a) Central Fielding Facility. Provide adequate sheltered and a secure workspace for TDN Gateway equipment installation, issue, and storage of CCI and Materiel Fielding Team (MFT) tools. Provide office space with requisite office furnishings for the MFT Site Chief. Provide a storage area large enough to store 4 TDN Gateways and accessible to large trucks. The storage area should have adequate space for the use of a forklift to offload material from trucks to the storage area and material to/from the storage area to the installation area. The facility should have adequate power for operation of the MFT's office equipment (computer and fax machines) and power tools. Provision or access to Class A telephone service for voice, data, and fax is also required.

(b) Central Training Facility. Provide adequate secure classroom space with the capacity to conduct New Equipment Training (NET) for eight students. Office space is required for the Training Supervisor and support personnel with requisite office furnishings. Provision or access to Class A telephone service for voice, data, and fax is also required.

(c) Unit Representative. Each unit fielded the TDN Gateway is to provide a representative authorized to conduct a joint Limited Technical Inspection (LTI) with the MFT representative for acceptance of the TDN Gateway to the unit. An authorized unit representative will also be required for acceptance and invoice of the CCI components issued with the TDN Gateway.

(d) Command Single Point of Contact (POC). A single POC from the Commander's Staff, authorized to act as liaison and coordinator for the fielding effort, is required. This representative is required in order to resolve any problems or issues that may arise with facilities provided, as well as conflicts between the unit fielded and the MFT. This POC is also the command representative to the TDN Project Officer for resolution of problems associated with fielding of the TDN Gateway.

(e) Material Disposal. As TDN Gateway fielding creates disposable and recyclable materials, dumpsters and other appropriate disposal containers are required at the fielding site.

(f) Transportation and Material Handling Equipment. Provision of transport of TDN Gateway material from the base or facility Traffic Management Office (TMO) will be required. The availability of a forklift and operator for use by MFT warehouse personnel is required for moving, loading, and unloading TDN Gateway material in the storage area.

(2) MARCORSYSCOM. The TDN Project Officer is responsible for the execution, direction, and funding of the TDN Gateway fielding effort, i.e., employing a contracted MFT to install and issue the TDN Gateway to units possessing authorized allowances, in addition to conducting concurrent NET training as directed. The TDN Project Officer may designate staff members as the Fielding and/or Training Officer/Chief, as appropriate. The Fielding and Training Officer are the representatives of the TDN Project Officer and are responsible for the direction and provision of material to the MFT and the resolution of problems associated with fielding and training.

(a) MFTs. The TDN Gateway MFTs are responsible for the day-to-day operation of TDN Gateway fielding and training to major commands/activities based on the fielding and training schedule and other agreements established by MARCORSYSCOM and the gaining command.

(b) MFT Site Chief. The MFT Site Chief is the representative of the TDN Project Officer in matters associated with day to day fielding of material. The Training Chief is the representative of the TDN Project Officer in matters associated with training. Fielding is conducted in accordance with agreements, written or verbal, authorized by MARCORSYSCOM, the TDN Project Officer, and the major command and/or the POC. Quantities fielded will be in accordance with the allowances in Appendix A of this ULSS. Exceptions to Appendix A are authorized by Commanding General (CG), Marine Corp Combat Development (MCCDC) only.

(c) MFT Administrative Matters. Funding, billeting and transportation matters for personnel of the TDN Gateway MFT are the responsibility of the TDN Project Officer and the gaining command's POC.

(d) MFT Arrival at Gaining Command. The TDN Project Officer or the Fielding Officer/Chief will ensure that gaining commands are notified of the pending arrival of the TDN Gateway MFT, its personnel composition, and any special requirements associated with their stay in the command's area. This notification will be by Naval message or other appropriate means.

(e) Coordination of Fielding Effort. The TDN Project Officer or a representative will coordinate the fielding effort to the gaining commands in conjunction with the MFT Site chiefs as required.

(3) COMMARCORLOGBASES, Albany. Assign participants to the MFT.

(4) Software Support Activity. Assign participants to the MFT.

#### 4. Logistics Support

a. Maintenance Support. The TDN Gateway relies to a great extent on contractor/vendor support for maintenance. However, flexibility for organic support at the organizational and intermediate levels does exist.

(1) Maintenance Concept. The TDN Gateway maintenance concept was developed using standard Marine Corps levels and echelons of maintenance. The TDN Gateway will be supported at the lowest level and as far forward to the user as possible. This concept provides for three levels of maintenance: organizational, intermediate, and depot. These levels are further divided into five echelons, first and second echelon at the organizational level of maintenance, third and fourth echelons at the intermediate level, and fifth echelon at the depot level of maintenance.

(a) The TDN Gateway is comprised of equipment supported by three separate maintenance commodities: Motor Transport Maintenance supports the H-HMMWV; Engineer Maintenance supports the ECU, the S-788/G Lightweight Multipurpose Shelter (LMS), and the MCPS to include Bootwall Assembly; while Communications-Electronics Maintenance supports the computers and related communication equipment. The using unit has responsibility to provide organizational level maintenance, to include first echelon preventive maintenance on all organic assets.

(b) The H-HMMWV, ECU, LMS, and MCPS with Bootwall Assembly, requiring maintenance beyond the unit's maintenance authorization, will be evacuated in accordance with standard Marine Corps maintenance procedures to the Maintenance Battalion of the supporting Force Service Support Group (FSSG) for repair.

(c) Echelons of maintenance are outlined in the unit's Table of Organization (T/O) mission statement. The maintenance concept is to provide the using unit fault isolation capability to the Line Replaceable Unit (LRU). Typically, the TDN Gateway Operator, assisted by other maintenance personnel, will accomplish first and second echelon maintenance tasks for the TDN Gateway. The priority and emphasis for TDN Gateway maintenance is system restoration. Personnel authorized to perform TDN Gateway maintenance will remove the faulty LRU, replace it with a functional item, and evacuate the faulty LRU to intermediate maintenance for repair and/or exchange, as appropriate.

#### 1 Organizational Level Maintenance (First and Second Echelon). The TDN

Gateway Operator (Military Occupational Specialty (MOS) 4066 (0651/0661) with additional MOS 4068 (0668) and maintenance personnel, MOS 2818, 2821, and 2822 will perform organizational maintenance on the TDN Gateway. Organizational maintenance tasks will include, but are not limited to:

- a Initializing and configuring the tactical WAN installation of application software and configuring the TDN Gateway and associated WAN,
- b Installing, setting up, and configuring all components of the TDN Gateway,
- c Isolating faults using Built-in-Test (BIT)/Built-in-Test Equipment (BITE) and General Purpose Test Equipment, which consists of an Internetwork Protocol Analyzer,
- d Restoring system and application software,
- e Providing advanced second echelon maintenance to server operators,
- f Repair of the TDN system by removing and replacing failed LRUs, and
- g Completion of required repairs on internal or external TDN cables and cable connectors.

2 Intermediate Level Maintenance (Third and Fourth Echelon). General Dynamics Communication Systems (GD-CS) will perform intermediate maintenance during the warranty period on the TDN Gateway, excluding equipment identified in Table 3. At the end of the warranty period, trained technicians, MOS 2818, 2821, and 2822 will perform intermediate maintenance. Intermediate maintenance tasks will include, but are not limited to:

- a Fault isolation of the LRU/circuit card using standard tools and test equipment,
- b Identification and replacement of defective components, alignment (if required), and return of the equipment to full operation with minimal downtime,
- c Completion of required repairs on internal or external TDN cables and cable connectors, and
- d Assistance to TDN operator personnel on complex maintenance tasks.

3 Depot Level Maintenance (Fifth Echelon). Depot level maintenance includes the complete overhauling, rebuilding, and calibration of equipment, as well as the performance of highly complex maintenance actions. GD-CS will perform depot level maintenance for warranted components of the TDN Gateway. Material not covered by warranty will follow established organic maintenance procedures. Complete system rebuild or overhaul is not envisioned for the TDN Gateway.

(2) Designated Support Depots. Upon completion of the Interim Contractor Support (ICS) period, the Marine Corps Maintenance Center Activity, Marine Corps Logistics Bases, Albany, GA will accomplish organic depot support.

(3)Calibration Requirements. The General Purpose Test Equipment listed in Table 3 is currently available in the Marine Corps inventory and will follow established calibration requirements:

Table 3. General Purpose Test Equipment Requiring USMC Calibration

NOMENCLATURE	NSN	QTY	TAMCN
Test Set, WAN Analyzer	6625-01-428-9181	1	A7083
Test Set, Telecommunications, BIT w/Break-out Box, RS-232	6625-01-380-3788	1	H7029

b. Contractor Support Requirements

(1)Depot Support. Depot support during the warranty period will be provided by the production contractor, GD-CS at their Taunton, MA, facility in order to optimize the use of production engineers and expedite problematic equipment resolutions. TDN Gateways with a valid warranty extending beyond December 2004 will rely on GD-CS for depot support. After the warranty period expires, TDN Gateways will rely on MARCORLOGBASES, Albany, GA. Non-warranted component and/or vendor support will be utilized as appropriate through coordination with the Weapon System Manager (WSM) at MARCORLOGBASES, Albany, GA.

(2) ICS. The Commander, MARCORSYSCOM (COMMARCORSYSCOM), has funded GD-CS to provide interim support services from January 2002 to December 2004. Units are responsible for budgeting resources for non-warranted repairs. Upon completion of the ICS period, TDN Gateways still possessing a valid warranty will coordinate warranty repairs with the Warranty Administrator at MARCORLOGBASES. In addition, the contractor will provide the following services, as a minimum:

(a) GD-CS will maintain a fully integrated contractor logistics database system (Guardian) to capture/record details on warranty failure rates and maintenance actions to include: date, time, reporting unit, response time, item, part number, failure and failure mode, and corrective action taken. The Guardian logistics database system will provide warranty tracking and transfer control when replacement parts are provided as well as part/stock number cross-referencing. Guardian will be available on-line and will allow management personnel at MARCORLOGBASES, Albany, and MARCORSYSCOM direct access to the warranty database. Guardian captured data will be utilized to identify failure rates/trends and to compile spares/repair parts usage data necessary to transition to organic maintenance procedures at the end of the ICS period. GD-CS will deliver to the Government all documentation generated during the ICS period in order to facilitate the transition to organic support.

(b) Establish and maintain a 24-hour per day, 365-day per year, technical assistance helpdesk, and hotline to assist operator and maintenance personnel. The toll free number established is 1-877-888-USMC. A log shall be maintained which documents all calls to include using unit. (The GD-CS technical assistance hotline can be accessed internationally for a toll.)

(c) Contractor Logistics Support (CLS). CLS for the TDN Gateway is not envisioned at this time.

c. Manpower, Personnel, and Training

(1) Personnel Requirements. Specific manpower, personnel, and training requirements, including job tasks, have been formalized in the Manpower and Training Plan (MTP).

(a) TDN Gateway Operator/Maintainer. Each TDN system will require two gateway operators/maintainers, MOS 4066 (0651/0661), with a required secondary MOS of 4068 (0668), (Sergeant (Sgt) - Gunnery Sergeant (GySgt)), Data Network Chief, per 12-hour shift. The primary responsibilities of the gateway operator/maintainers will include, but are not limited to:

- 1 Operating the TDN Gateway to include set-up and tear down,
- 2 Initializing and configuring the tactical WAN,
- 3 Installing application software and configuring the gateway/associated WAN,
- 4 Installing and testing peripheral devices,
- 5 Monitoring system operation and network performance,
- 6 Restoring system and application software,
- 7 Assigning functional user identifications, passwords, and privileges,
- 8 Assisting in server/LAN operation, as required,
- 9 Identifying individual TDS interface requirements,
- 10 Providing advanced second echelon maintenance for TDN Server Operators,
- 11 Repairing the TDN system by removing and replacing failed LRUs.

(b) TDN Gateway Maintainers. TDN Gateway Maintainers will be personnel with MOS 2818, 2821, and 2822 will perform designated maintenance tasks that is beyond the capabilities of the operator/maintainer.

1 Warranty Period. During the warranty period, first and second echelon maintenance will be accomplished by TDN Gateway Operators/Maintainers. Intermediate level maintenance for warranted items will be performed by GD-CS. Specific tasks will be accomplished in accordance with warranty procedures.

2 Post Warranty Period. Once the TDN Gateway three-year system warranty ends, TDN Gateway Operators/Maintainers will accomplish intermediate level maintenance tasks. Authorized post warranty maintenance tasks include, but are not limited to:

- a Monitoring system operation and network performance,
- b Isolating faults using BIT/BITE and General Purpose Test Equipment in the form of COTS LAN/WAN analyzers,
- c Restoring system and application software,
- d Providing advanced second echelon maintenance for TDN Server Operators,

- e Repairing the TDN system by removing and replacing failed LRUs,
- f Continued fault isolation of LRUs/circuit cards using standard tools and test equipment or special tools and test equipment as provided by the TDN Gateway,
- g Completion of required repairs on internal or external TDN cables and cable connectors,
- h Assisting TDN Gateway Operator/Maintainer personnel on complex maintenance tasks.

(2)Training Requirements. Training will include: (a) Follow-on Operational Test and Evaluation (FOT&E) training, (b) contractor provided Instructor and Key Personnel (I&KP) training, (c) NET conducted by I&KP team and/or contractor personnel and (d) MOS formal school training. The contractor will present the courses listed in Table 4 to the number of students at the sites indicated:

Table 4. TDN Gateway Operator/Maintainer Course Sites

TYPE/LENGTH	# COURSES	# STUDENTS	LOCATION	DATES
FOT&E - 59 days	1	8 per class	GD-CS Taunton, MA	29 Jun 01 - 28 Aug 01
I&KP - 43 days	1	8 per class	Camp Pendleton, CA	11 Oct 01 - 13 Dec 01
NET I - 53 days	1	8 per class	Camp Pendleton, CA	25 Jan 02 - 10 Apr 02
NET II - 54 days	1	8 per class	Camp Lejeune, NC	18 Apr 02 - 3 Jul 02
NET III - 53 days	1	8 per class	Camp Hansen, Oki	9 Aug 02 - 23 Oct 02
NET IV - 53 days	1	8 per class	Reserves-TBD	26 Nov 02 - 21 Feb 03

(a) FOT&E Training. The first increment of an operator/maintainer course to support the FOT&E shall be taught by the contractor using draft, Government-approved courseware. Government-approved comments and recommendations for course improvement received from FOT&E course attendees shall be incorporated into the final, approved courseware. FOT&E Training will be conducted at GD-CS Taunton, MA. Marines possessing primary MOS 4068 (0668) will be required to attend MOS 4066 (0651/0661) instruction prior to commencing MOS 4068 (0668) training.

(b)I&KP Training. The second increment of training shall be I&KP training to be conducted at Camp Pendleton, CA. Instructors from MCCES, CCSS, MCTSSA, and designated personnel from each MEF will attend I&KP training. These personnel will then be used to initiate and transition TDN Gateway specific training into the respective school and MOS producing curriculum. Government-approved attendee comments and recommendations for course improvement shall be incorporated into the courseware.

(c) NET. New equipment training will enable the using unit to utilize the TDN Gateway system in its intended operational mode and will coincide with initial delivery of the system. The NET Team will consist of instructors provided by the contractor. This training will be conducted at each receiving MEF location.



(d) MOS Formal Training. The contractor will develop training material and products of sufficient depth to demonstrate and teach all major modes of operation and maintenance. This training package shall be inserted into the appropriate training tracks. Details on performing TDN operation and maintenance will be covered, in addition to TDN Gateway system administration and network planning concepts. Formal MOS training will be conducted at MCCES for the TDN Gateway Operator/Maintainer, MOS 4068 (0668) (prerequisite instruction MOS 4066 (0651/0661)), Advance Network Chief Course.

1 Additional TDN Gateway Maintainers. At the end of the ICS period, training will be developed and provided to MOS 2818/2821 personnel, as needed for assumption of intermediate maintenance tasks.

(3)Training Support Items. A limited number of TDN Gateways are provided for training purposes. Table 5 lists current allowances of training support items.

Table 5. TDN Gateway Training Support Items

LOCATION	QTY
MCCES	2

d. Supply Support. In order to maintain system readiness levels, IIP packages will be provided to augment system warranty procedures. Typically, unit maintenance activity supply representatives will facilitate the direct exchange/return of unserviceable LRUs, as outlined in the unit Warranty Administrator's responsibilities. Limited product drawings will be required to support the system-level provisioning effort. Drawings for otherwise provisioned items will be utilized and included in the system technical data package, if available.

(1)Spares. An Initial Issue Provisioning (IIP) package containing low-density spare/repair parts will be released by MARCORLOGBASES, Albany, GA in support of the TDN Gateway. Active MEFs and MARFORRES IIP packages will be released to coincide with the delivery schedule listed in Appendix A of this document. MCCES and MCTSSA will receive a low-density IIP package in the second quarter of FY02.

(2)Normal density spare/repair parts, common to both the TDN Server and TDN Gateway will be provisioned as part of an IIP package released for the TDN Server to the SASSY Management Unit (SMU) of each active MEF's FSSG, MCCES, and MCTSSA.

(3) Spares Transition. During the ICS period, maintenance failure rates captured by the contractor's Guardian Logistics database will be monitored by MARCORLOGBASES, Albany, to identify trends. Upon the completion of the ICS period, MARCORLOGBASES, using this data, will augment IIP spare/repair parts blocks previously positioned and transition to organic supply procedures.

e. Support Equipment. The TDN Gateway is designed to minimize support equipment required at the user level. It is supportable by the common suite of Marine Corps General Purpose Test Equipment. The TDN Gateway is an integration of COTS and Government-Off-The-Shelf (GOTS) hardware and software. Test, Measurement and Diagnostic Equipment (TMDE) for the TDN Gateway will be either Special Tools, Common Tools, Special Purpose Electronic Test Equipment or General Purpose Test Equipment and is identified below.

(1)Special Tools. See Table 6 below.

Table 6. Special Tools

NOMENCLATURE	PART NUMBER	NSN	TAMCN
Remover, Electrical Contact (BNC Cable Plug)	RT1S	5120-01-019-4154	N/A
Remover, Electrical Contact (Trompeter PL 155 Short)	RT4S	5120-01-177-4961	N/A
Remover, Electrical Contact (Trompeter PL 155 Long)	RT4L	5120-01-222-6648	N/A

(2)Common Tools. See Table 7 below.

Table 7. Common Tools

NOMENCLATURE	PART NUMBER	NSN	TAMCN
Tool Kit, Electronic Maintenance	270067	5180-01-244-1290	A7900

(3)Special Purpose Test Equipment. No Special Purpose Test Equipment is identified for the TDN Gateway.

(4)General Purpose Test Equipment. See Table 8 below.

Table 8. General Purpose Test Equipment

NOMENCLATURE	PART NUMBER	NSN	TAMCN
Test Set, Telecommunications, BIT w/Break-out Box, RS-232	72/62MN	6625-01-380-3788	H7029
Analyzer, WAN	AN1LW-XN1CX0NFB-2	6625-01-428-9181	A7083
Digital Multimeter, Fluke *	77/BN	6625-01-336-3372	H7030
Test Set, LAN *	686/AN	6625-01-456-1561	A7084
Cable Tester, WaveTek *	LANTEK, PRO XL	6625-01-449-3658	H7015

\* Using Unit Responsible Item (URI) on SL-3.

(5) Application Program Sets and Test Program Sets. There are no Application Program Sets or Test Program Sets identified at this time.

(6) Other Support Equipment. See Appendix H.

f. Technical Publications. The final technical publications on CD-ROM, which will support and be associated with this WS/E will be overpacked with the system. All system publications will be found on the Interactive Electronic Technical Manuals (IETM) CD-ROM identified below. A complete listing of TMs required to support the system and provided as part of the IETM can be found in Appendix C.

TM Number	Short Title	PCN
TM 10666A-CD	Operation and Maintenance Manual with Parts List, Tactical Data Network (TDN) Gateway, AN/TSQ-222	176 106660 00

The IETM developed for this WS/E has all applicable publications as part of the IETM. There is a management plan for the IETM located in Appendix E. It will be very important for the Marines and the WSM to ensure all publications used in this IETM are kept current and they are identified whenever there are changes. Marines are reminded to review the procedures for submitting a Navy and Marine Corps (NAVMC) form 10772 for recommended changes or suggestions to publications.

g. Computer Resources Support

(1) Software/Firmware Support. Due to the extensive use of COTS/NDI software, a dedicated Weapon System Support Activity (WSSA) will not be required to support the TDN Gateway. MCTSSA, the Assistant Program Manager for Software, will perform any WSSA functions required to include updating, staffing, revising, and distributing the approved Computer Resources Life Cycle Management Plan (CRLCMP). As outlined in the Software Transition Plan, GD-CS will maintain the software until turned over to the government. While under GD-CS control, MCTSSA will provide the government review, including security concerns, of proposed changes to the software baseline. When the software has transitioned to government control, MCTSSA's local procedures for configuration control and software maintenance will be in effect. At a minimum, MCTSSA will maintain configuration control of the software identified in Tables 9 through 16.

(2) Software Description. The TDN Gateway has two workstations per security enclave, a total of four workstations per TDN Gateway. Within one security enclave, there is a TDN Gateway INTERNET Service Provider (ISP) workstation and a TDN Gateway Network Management System (NMS) workstation. The software listed in Tables 9, 10, 11, and 12 describe the CDs needed to support the ISP installation process. Like the TDN Server, the TDN Gateway software will support an accelerated or manual installation. Software identified in Tables 13, 14, 15, and 16 are required to complete the TDN Gateway NMS software installation process. Table 9 identifies cloned software loaded to each CD that will perform a standard installation of the TDN Gateway ISP workstation.

Table 9. TDN Gateway ISP Workstation Cloned Software

TDN Gateway ISP			
Software Nomenclature	Cloned CD		Part Number
	CD #	Software to be loaded	
NT 4.0 Operating System	1 / 1	Accelerated	99002A7061-1
Service Pack 5 for NT 4.0	1 / 1	Accelerated	99002A7061-1
Video Driver: Matrox Millennium G200	1 / 1	Accelerated	99002A7061-1
Norton AntiVirus 5.0	1 / 1	Accelerated	99002A7061-1
Network Time Protocol (XNTP 3.5) Client/Server	1 / 1	Accelerated	99002A7061-1
Window Service For Unix 1.0	1 / 1	Accelerated	99002A7061-1
Printer Driver	1 / 1	Accelerated	99002A7061-1
Tape Driver	1 / 1	Accelerated	99002A7061-1
Norton SpeedDisk 5.0	1 / 1	Accelerated	99002A7061-1
Adobe Acrobat Reader 4.0	1 / 1	Accelerated	99002A7061-1
MetaIP 4.1 Enterprise Edition (with SP3)	1 / 1	Accelerated	99002A7061-1

TDN Gateway ISP software primarily resides on the TDN Gateway ISP workstation. Table 10 below identifies the InstallShield software loaded to each CD required to perform a standard installation of the TDN Gateway ISP workstation.

Table 10. TDN Gateway InstallShield Software

TDN Gateway ISP			
Software Nomenclature	InstallShield CD		Part Number
	CD #	Software to be loaded	
NT 4.0 Operating System	1 / 5	Manual	99002A7058-1
Service Pack 5 for NT 4.0	1 / 5	Manual	99002A7058-1
Video Driver: Matrox Millennium G200	1 / 5	Manual	99002A7058-1
Norton AntiVirus 5.0	1 / 5	Manual	99002A7058-1
Netscape Communicators 4.7	1 / 5		99002A7058-1
Walusoft TFTP Suite Pro 2000	1 / 5		99002A7058-1
Network Time Protocol (XNTP 3.5) Client/Server	1 / 5	Manual	99002A7058-1
Tera Term Pro 2.3			99002A7058-1
Window Service For Unix 1.0	2 / 5	Manual	99002A7058-1
Printer Driver	2 / 5	Manual	99002A7058-1
Tape Driver	2 / 5	Manual	99002A7058-1
Norton SpeedDisk 5.0	2 / 5	Manual	99002A7058-1
Adobe Acrobat Reader 4.0	2 / 5	Manual	99002A7058-1

TDN Gateway ISP			
Software Nomenclature	InstallShield CD		Part Number
MetalP 4.1 Enterprise Edition (with SP3)	2 / 5	Manual	99002A7058-1
	<b>CD #</b>	<b>Software to be loaded</b>	
Internet Explorer 4.02	3 / 5	Accelerated /Manual	99002A7058-1
NT Option Pack 4 (IIS 4.0 & FTP)	3 / 5	Accelerated /Manual	99002A7058-1
SiteNet MultiLink 1.1	3 / 5	Accelerated /Manual	99002A7058-1
COE Kernel 3.4	3 / 5	Accelerated /Manual	99002A7058-1
HPOV NNM 6.1	3 / 5		99002A7058-1
DMS GWS 2.0.3 (Microsoft Exchange 5.5)	4 / 5	Accelerated /Manual	99002A7058-1
Veritas Backup Exec 8.0	4 / 5	Accelerated /Manual	99002A7058-1
Veritas Backup Exchange Module	4 / 5	Accelerated /Manual	99002A7058-1
Install Shield Script	1 & 3 / 5	Manual	99002A7058-1
Norton Ghost 6.0	4 / 5	Accelerated	99002A7058-1
NNM-RME Integration Package	5 / 5		99002A7058-1
CiscoWorks 2000	5 / 5		99002A7058-1

Table 11 identifies the software loaded on CD and floppy diskette required to perform a standard installation of the TDN Gateway ISP workstation.

Table 11. TDN Gateway Standard Installation Software

TDN Gateway ISP			
Software Nomenclature	TDN/DTC MIBs CD		Part Number
	<b>CD #</b>	<b>Software to be loaded</b>	
MIBs	1 / 1	Accelerated/Manual	99002A7069-1
Software Nomenclature	Startup Diskette		Part Number
	<b>CD #</b>	<b>Software to be loaded</b>	
Boot Disk	1 / 1	Accelerated/Manual	99002A7062-1

Table 12 identifies the ISP original operating system software loaded on CD.

Table 12. TDN Gateway ISP Original Operating System (OS) CD Software

TDN Gateway ISP			
Software Nomenclature	Original OS CD		Part Number
	<b>CD #</b>	<b>Software to be loaded</b>	
Windows NT Server OS 4.0	1 / 1	Manual	99002A7059-1

TDN Gateway NMS software primarily resides on the TDN Gateway NMS workstation. Table 13 identifies the cloned software loaded to each CD required to perform a standard installation of the TDN Gateway NMS workstation.

Table 13. TDN Gateway NMS Cloned Software

TDN Gateway NMS			
Software Nomenclature	Cloned CD		Part Number
	CD #	Software to be loaded	
NT 4.0 Operating System	1 / 1	Accelerated	99002A7061-1
Service Pack 5 for NT 4.0	1 / 1	Accelerated	99002A7061-1
Video Driver: Matrox Millennium G200	1 / 1	Accelerated	99002A7061-1
Norton AntiVirus 5.0	1 / 1	Accelerated	99002A7061-1
Netscape Communicators 4.7	1 / 1	Accelerated	99002A7058-1
Walusoft TFTP Suite Pro 2000	1 / 1	Accelerated	99002A7058-1
Tera Term Pro 2.3	1 / 1	Accelerated	99002A7058-1
Network Time Protocol (XNTP 3.5) Client/Server	1 / 1	Accelerated	99002A7061-1
Window Service For Unix 1.0	1 / 1	Accelerated	99002A7061-1
Printer Driver	1 / 1	Accelerated	99002A7061-1
Tape Driver	1 / 1	Accelerated	99002A7061-1
Norton SpeedDisk 5.0	1 / 1	Accelerated	99002A7061-1
Adobe Acrobat Reader 4.0	1 / 1	Accelerated	99002A7061-1
MetaIP 4.1 Enterprise Edition (with SP3)			

TDN Gateway NMS software primarily resides on the TDN Gateway NMS workstation. Table 14 below identifies the InstallShield software loaded to each CD required to perform a standard installation of the TDN Gateway NMS workstation.

Table 14. TDN Gateway NMS Workstation InstallShield Software

TDN Gateway NMS			
Software Nomenclature	InstallShield CD		Part Number
	CD #	Software to be loaded	
NT 4.0 Operating System	1 / 5	Manual	99002A7058-1
Service Pack 5 for NT 4.0	1 / 5	Manual	99002A7058-1
Video Driver: Matrox Millennium G200	1 / 5	Manual	99002A7058-1
Norton AntiVirus 5.0	1 / 5	Manual	99002A7058-1
Netscape Communicators 4.7	1 / 5	Manual	99002A7058-1
Walusoft TFTP Suite Pro 2000	1 / 5	Manual	99002A7058-1

TDN Gateway NMS			
Software Nomenclature	InstallShield CD		Part Number
Network Time Protocol (XNTP 3.5) Client/Server	1 / 5	Manual	99002A7058-1
Window Service For Unix 1.0	2 / 5	Manual	99002A7058-1
Tera Term Pro 2.3	2 / 5	Manual	99002A7058-1
Printer Driver	2 / 5	Manual	99002A7058-1
Tape Driver	2 / 5	Manual	99002A7058-1
Norton SpeedDisk 5.0	2 / 5	Manual	99002A7058-1
CD # Software to be loaded			
Adobe Acrobat Reader 4.0	2 / 5	Manual	99002A7058-1
MetaIP 4.1 Enterprise Edition (with SP3)	2 / 5		99002A7058-1
Internet Explorer 4.02	3 / 5	Accelerated /Manual	99002A7058-1
NT Option Pack 4 (IIS 4.0 & FTP)	3 / 5	Accelerated /Manual	99002A7058-1
SiteNet MultiLink 1.1	3 / 5	Accelerated/Manual	99002A7058-1
COE Kernel 3.4	3 / 5	Accelerated/Manual	99002A7058-1
HPOV NNM 6.1	3 / 5	Accelerated/Manual	99002A7058-1
DMS GWS 2.0.3 (Microsoft Exchange 5.5)	4 / 5	Manual	99002A7058-1
Veritas Backup Exec 8.0	4 / 5	Manual	99002A7058-1
Veritas Backup Exchange Module	4 / 5		99002A7058-1
Install Shield Script	1 & 3 / 5	Manual	99002A7058-1
Norton Ghost 6.0	4 / 5	Accelerated/Manual	99002A7058-1
NNM-RME Integration Package	5 / 5	Manual	99002A7058-1
CiscoWorks 2000	5 / 5	Manual	99002A7058-1

Tables 15 identifies the software loaded on the CD and the floppy diskette required to perform a standard installation of the TDN Gateway NMS workstation.

Table 15. TDN Gateway NMS Workstation Standard Installation Software

TDN Gateway NMS				
Software Nomenclature		TDN/DTC MIBs CD		Part Number
		CD #	Software to be loaded	
MIBs		1 / 1	Accelerated/Manual	99002A7069-1
Software Nomenclature		Startup Diskette		Part Number
		CD #	Software to be loaded	
Boot Disk		1 / 1	Accelerated/Manual	99002A7062-1

Table 16 identifies the software required to perform a manual installation.

Table 16. TDN Gateway NMS Workstation OS Manual Installation Software

TDN Gateway NMS			
Software Nomenclature	Original OEM CD		Part Number
	CD #	Software to be loaded	
Windows NT Server OS 4.0	1 / 1	Manual	99002A7059-1
Software Nomenclature	Original OEM CD		Part Number
	CD #	Software to be loaded	
Cisco Works 2000	1 / 1	Manual	99002A7070-1

(3)Software Trouble Reporting. All field-level computer software/firmware problems and requests for changes will be coordinated with the APM Software at MTSSA.

(4)Software Changes. All software changes or new software will be developed by MCTSSA, tested, loaded into the appropriate media (CD-ROM or Digital Audio Tape (DAT)), and shipped to the fielding sites.

h. Facilities. To be determined.

i. Existing Facilities. The AN/TSQ-222 is fully supportable through the use of existing facilities. Specific facility requirements, including any additional security restrictions, will be the responsibility of the owning unit.

(1)New Facilities. No new facilities are required to support the TDN Gateway.

(2)Interim Facilities. No interim facilities are required to support the TDN Gateway.

j. Packaging, Handling, Storage, and Transportation

(1)Packaging

(a) Preservation and packaging for long term storage and shipment to overseas destinations shall be in accordance with the level A requirements of MIL-STD-2073-1D, Appendix A, Table A.VI., Electronic Equipment and the guidelines of MIL-DTL-55507, Shelter, Electrical Equipment (With or Without Equipment), Packaging of. Items scheduled for domestic shipment, immediate use, or short-term



storage shall be preserved and packaged in accordance with the best commercial practices of ASTM D 3951-98.

(b) In the event of a return of an item or its components for repair, return to stock, etc., the owning unit shall be responsible for packaging and preservation in accordance with current policy and procedures (i.e. MIL-STD-2073-1D, DoD Standard Practice for Military Packaging, MCO 4030.36, Marine Corps Packing Manual, MIL-HDBK-263, Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies, and Equipment (Excluding Electrically Initiated Explosive Devices); and TI-4400-15/1, Packaging, Handling, Storage, and Transportation of Electrostatic Discharge Sensitive Items). Items returned for stock shall be in accordance with the level A requirements. Items returned for repair shall be to level B requirements. Should a repair/spare part, that is determined to be electrostatic sensitive, be required to be returned for repair or return to stock, it shall be packed and preserved in accordance with the requirements of MIL-STD-2073-1D, Appendix J, Table J.Ia., Specialized Preservation Code “GX” and TI-4400-15/1. All items subject to electrostatic discharge shall be in accordance with MIL-STD-129N, Standard Practice for Military Marking.

(2) Handling. Special handling of Controlled Cryptographic Items (CCI) is required for equipment associated with the TDN Gateway. The equipment must be handled in accordance with the Communications Security Material System Policy and Procedures Manual (CMS-1A), Section 535 (see Appendix G).

(3) Storage. Preservation and Packaging for long term storage shall be in accordance with level A requirements of MIL-STD-2073-1D, DoD Standard Practice for Military Packaging, Appendix A, Table A.VI., Electronic Equipment and guidelines of MIL-DTL-55507, Shelter Electrical Equipment, (With or Without Equipment) Packaging of. Should any special procedures for shelf maintenance or special storage conditions be required, they will be identified by special storage instructions in the TDN Gateway IETMs or Supply Bulletins.

(4) Transportation. The TDN Gateway is built into the S-788/G shelter. The TDN Gateway meets the same transportability requirements as the H-HMMWV. The TDN Gateway configuration consists of two H-HMMWVs. One will transport the shelterized system and the other will transport the required support equipment. The TDN Gateway is designed to be moved or shipped by: commercial and military surface truck transport; rail transport; military transport aircraft, to include the C-130, C-141, C-5, and C-17; and amphibious shipping.

(a) CCI Equipment. CCI equipment within the gateway must be transported in accordance with CMS-1A, Digital Communications Management System (DCMS) Policy and Procedures Manual. CCI, which are unkeyed and “decertified,” may be transported with other equipment provided it is in a sealed container and accounted for by a continuous receipt system. Special couriers are required only if the equipment is certified or “keyed” (see Appendix G).

(b) Testing. Prior to fielding, the TDN Gateway will undergo the Munson Road Test, the Rail Impact Test, and other shock and vibration tests.

(c) Helicopter Lift Certification. The TDN Gateway was verified by analysis with similar vehicle-mounted systems by Natick Laboratories.

k. Transportability and Naval Integration. To be determined.

l. Warranties. Each TDN Gateway has a three-year system warranty. GD-CS will provide a zero defect warranty covering workmanship, materials (hardware and firmware), design, and performance characteristics on the TDN Gateway. The warranty begins with the acceptance of the TDN Gateway. The warranty applies to all delivered equipment excluding equipment identified in Tables 1 and 3, and software identified in Tables 9 through 16. The warranty coverage will not cover components that become defective through no fault of the contractor (i.e., Government employee damaging a circuit card, improper operation, etc.). Payment for non-warranty repairs is the responsibility of the owning unit.

(1)Warranty Type. The warranty guarantees that equipment delivered, including equipment provided by vendors and subcontractors, will remain defect free for three years following acceptance when used in its intended field environment. Table 17 below represents warranty and ICS effective dates per gaining command.

Table 17. Warranty and ICS Effective Dates

GAINING COMMAND	WARRANTY	ICS
MCCES/MCTSSA	Jun 2001 - May 2004	Jan 2002 – Dec 2004
I MEF	Jan 2002 - Dec 2004	Jan 2002 - Dec 2004
II MEF	Apr 2002 - Mar 2005	Apr 2002 - Dec 2004
III MEF	Jul 2002 - Jun 2005	Jul 2002 - Dec 2004
MARFORRES	Oct 2002 - Sep 2005	Oct 2002 - Dec 2004

(2)Covered Items. A complete listing of warranted components is contained in Appendix D.

(3)Warranty Administrator. COMMARCORLOGBASES has appointed a Marine Corps Warranty Administrator for the TDN Gateway. The Warranty Administrator is responsible for coordinating warranty issues/matters with GD-CS. In the event of a warranty dispute, the following Warranty Administrator contact information applies:

MARINE CORPS LOGISTICS BASES  
 ATTN: 847-3  
 814 RADFORD BOULEVARD  
 ALBANY, GA 31704-1128  
 COML: (229) 639-6524/5  
 DSN: 567-6524/5  
 EMAIL: friersone@matcom.usmc.mil

(4) Contractor Responsibilities. Upon notification of a warranted item failure, GD-CS will provide the unit's Warranty Administrator with disposition instructions for return of the failed LRU. Transportation costs to and from the unit will be borne by GD-CS. Within 30 days of receipt of the failed LRU at the contractor's designated facility, GD-CS shall return a repaired or replacement item to the using unit.

(5) Special Handling Instructions. A NAVMC 1018 Inspection/Repair Tag shall be completed and affixed to the failed LRU prior to shipment to the contractor's designated facility. LRUs returned for repair will, whenever possible, be shipped in the reusable containers maintained by the unit maintenance activity from the original shipment of spares. Items that are electrostatic sensitive shall be appropriately marked and packaged in protective wrapping material. All items shall be packaged to provide adequate protection from environmental conditions during transit. Shipping containers and accompanying documents shall be marked "warranted item".

(6) Unit Warranty Administrator Procedures for Failed LRUs. Upon receipt of a failed LRU, the unit's Warranty Administrator will provide initial warranty verification/assessment. A visual inspection should be conducted to confirm that the LRU failure is in fact a warranty action. If misuse/abuse is suspected, the unit Maintenance Officer should be contacted. The unit's Warranty Administrator will verify the accurate completion of the NAVMC 1018 Inspection/Repair Tag depicting the LRU failure and contact the GD-CS technical assistance helpdesk toll free number, 1-877-888-USMC. The GD-CS technical assistance helpdesk will provide the unit's Warranty Administrator a Return Material Authorization (RMA) number along with disposition instructions for the failed LRU. The unit Warranty Administrator will package and ship the failed LRU to the contractor's designated facility. Pre-addressed shipping labels will be provided by GD-CS.

m. ESH

(1) The production, maintenance, and operation of the TDN Gateway does not require the use of any ozone depleting substances or any of the Environmental Protection Agency's list of 17 toxins.

(2) The uninterruptible power supplies contain sealed lead acid batteries. The fluorescent tube located inside the NEC monitor contains mercury; no special precautions are necessary unless the monitor screen is shattered. Disposition and disposal of lead acid batteries and damaged monitors shall be in accordance with established host-nation or federal, state, and local regulations.

(3) The TDN Gateway could potentially injure personnel by electric shock if high voltage points are touched. Voltage points are guarded and labeled to prevent inadvertent contact during maintenance. There are no operational procedures that require the user to access these voltages. Standard safety practices such as labeling, grounding, and incorporation of warnings into training and technical manuals have been utilized.

(4) When in an operational configuration, the TDN Gateway will connect with the TDN Server. The TDN Server utilizes transit cases that require a minimum three-man lift. Items that require more than

one person to lift have been labeled to identify personnel requirements and appropriate cautions have been incorporated into training and technical manuals.

- n. POA&M. To be determined.

#### 5. Actions Required to Place Equipment In Service

a. Gaining Commands. Gaining commands are required to complete the following actions to place the AN/TSQ-222 and supporting material/equipment into service:

(1)Inventory. Conduct an inventory and LTI of the TDN Gateway equipment per its enclosed packing list and provide a signed copy to: COMMARCORLOGBASES, (Attn: 847-3), Albany, GA, with information copies to COMMARCORSYSCOM (C4I COMM), and Commander, Marine Forces Atlantic (MARFORLANT) or Commander, Marine Forces Pacific (MARFORPAC) or Commander, MARFORRES respectively, not later than 10 working days after receipt.

(2)In-service Date. Notify COMMARCORSYSCOM (Code C4I COMM) and, COMMARCORLOGBASES (Attn: 847-3), when new equipment is placed in service.

(3)POLs. Requisition POLs.

(4)Accountability. Gaining commands will ensure accountability for new assets on unit property records/controlled-item-reporting per the current editions of MCO P4400.150 and MCO P4400.82.

(5)Post Evaluation Reports. Gaining commands will submit post fielding evaluation reports per the current editions of MCO 4105.4 and TM 4420 15/1.

(6)Materiel Defects Reporting. A PQDR will be submitted for category 1 and 2 deficiencies identified, per the current edition of MCO 4855.10 and local operating procedures. The MARCORSYSCOM Project Officer will be advised of deficiencies requiring immediate attention.

(7)Retrograde of Existing Equipment. Not applicable. The TDN Gateway is a new capability and will not replace any existing weapon systems.

(8)Obtaining Supporting Consumables. Gaining commands are required to budget for and requisition supporting consumables. These items should be readily obtainable from local Direct Support Supply Center (DSSC) (ServMart) using locally established procedures (for a complete listing of consumables, see Appendix F).

(9) Security Requirements. Ensure all CCIs, classified disk cartridges, hard drives, and data will be stored in accordance with CMS-1A, DCMS Policy and Procedures Manual. Table 18 below represents CCI used with the TDN Gateway.

Table 18. TDN Gateway CCI

NOMENCLATURE	NSN/PART NUMBER	QTY	TAMCN
Inline Network Encryptor, GTE, KG-175, TACLANE	5810-01-463-0133/ P/N 0N649470	1	A8088
TED, KIV-19	5810-01-449-7179	2	A8085
DSVT, KY-68	5810-01-082-8404	4	A8083
LED, KIV-7HS w/Wireline Adapter	5810-01-431-8264	16	A8084
Secure Terminal Equipment (STE) Office	5810-01-457-0292	4	TBD

(10) Controlled Item Reporting. The TDN Gateway is a controlled item and will be reported per the current edition of MCO P4400.82.

(11) MCGERR. The TDN Gateway is a candidate for reporting under the MCGERR system as specified in MCBul 3000.

b. COMMARCORLOGBASES, Albany. The WSM will ensure the following is accomplished:

(1) Establish and implement administrative control mechanisms for supply support and depot level maintenance programs, which are provided by the contractor or system integration facility.

(2) Provide gaining unit requests for T/E deficiencies required to support the functionality of the new product.

(3) Identify when fielding reaches 85 percent of the programs planned allowances to the Program Manager (PM). If this equipment is reportable per the current edition of MCBul 3000, notify Headquarters Marine Corps (LPP-1) when fielding reaches 85 percent.

(4) Monitor national stock number (NSN) attainment and evaluate maintenance failure rates captured by the Guardian logistics database system. Augment positioned spares upon completion of the ICS period, and transition the system to organic supply support.

(5) Ensure the assigned Warranty Administrator resolves warranty issues reported by the user community, track PQDRs submitted for trend analysis, and report the results to the PM.

(6) Post published ULSS on document repository.

c. MARCORSYSCOM. The Program Management Office will ensure the following is accomplished:

(1) Ensure that the system is loaded to the Logistics Management Information System (LMIS) and the appropriate T/Os and T/Es are updated. Ensure action is initiated to reflect allowance data in the Equipment Allowance File (EAF) coinciding with the project in-service date.

(2) Field the system to the Operating Forces. Notify appropriate activities of any problems or issues that delay fielding beyond the projected in-service date.

(3) Program funds and budget for the initial fielding of the end item.

(4) Provide all aspects of technical and logistics assistance to the gaining commands. Periodically provide briefing on any planned product improvements.

(5) Maintain life cycle management of the system per the current editions of MCO 4105.4 and TM 4420-15/1, as required.

(6) Provide COMMARCORLOGBASES, Albany the digital signed ULSS for posting on the document repository.

d. Designated Software Support Activity. Duties of the software support activity will be performed by MCTSSA.



## APPENDIX A

## List of Allowances and Delivery Schedules

T/E NO.	UNIT NAME	UNIT PLANNED ALLOWANCE	MULTIPLIER	TOTAL	DELIVERY SCHEDULE											
					FY01				FY02				FY03			
					1	2	3	4	1	2	3	4	1	2	3	4
<b>MEF HQ</b> – <u>Rationale</u> : One GW to support MEF HQ and Component HQ or one GW for Main and Forward CPs or one GW for Main and Rear CPs..																
N4684	SUPPORT CO, COMM BN, I MHG	3	1	3						3						
N4784	SUPPORT CO, COMM BN, II MHG	3	1	3							3					
N4884	COMM CO, COMM BN, III MHG	3	1	3								3				
N4984	COMM CO, COMM BN, MARFORRES	3	1	3									3			
<b>DIVISION HQ</b> – <u>Rationale</u> : One GW to support HQ.																
N1015	COMM CO, HQBN, 1ST MARDIV	1	1	1						1						
N1025	COMM CO, HQBN, 2 MARDIV	1	1	1							1					
N1035	COMM CO, HQBN, 3D MARDIV	1	1	1								1				
N1045	COMM CO, HQBN, 4TH MARDIV	1	1	1									1			
<b>WING HQ</b> – <u>Rationale</u> : One GW to support HQs at each airfield.																
N8652	AIRFIELD DET, MWCS, MACG, 3D MAW	1	2	2						2						
N8652	AIRFIELD DET, MWCS, MACG, 2D MAW	1	2	2							2					
N8652	AIRFIELD DET, MWCS, MACG, 1ST MAW	1	1	1								1				
N8652	AIRFIELD DET, MWCS, MACG, 4TH MAW	1	1	1									1			
<b>FSSG HQ</b> – <u>Rationale</u> : One GW to support HQ.																
N3113	COMM CO, H&S BN, 1ST FSSG	1	1	1						1						
N3213	COMM CO, H&S BN, 2D FSSG	1	1	1							1					
N3313	COMM CO, H&S BN, 3D FSSG	1	1	1								1				
N3413	COMM CO, H&S BN, 4TH FSSG	1	1	1									1			
<b>SUPPORTING ESTABLISHMENTS</b>																
7720	MCCES, MCAGCC, 29 PALMS, CA	2	1	2			2									
7442	MCTSSA (MARCORSYSCOM), CA	1	1	1			1									
<b>SUSTAINMENT</b>																
7014	MCLB, ALBANY, GA (DMFA)	1	1	1									1			
N/A	WRMR, MCLB, ALBANY	1	1	1									1			
<b>ACTIVE FORCES:</b>																
<b>I MEF</b>				7												
<b>II MEF</b>				7												



**DRAFT****ULSS 002394-15**

T/E NO.	UNIT NAME	UNIT PLANNED ALLOWANCE	MULTIPLIER	TOTAL	DELIVERY SCHEDULE											
					FY01				FY02				FY03			
					1	2	3	4	1	2	3	4	1	2	3	4
III MEF				6												
SUPPORTING ESTABLISHMENTS				3												
RESERVES				6												
DMF				1												
WRMR				1												
TOTAL TDN GATEWAYS				31												

NOTE: The information provided above is accurate as of the date of publication of the ULSS. Subsequent changes to unit allowances or deliveries are reflected through the modification of quantities in the EAF.

**APPENDIX B****Schedule of Events**

Instructor and Key Personnel (I&KP) Training	Oct 01
Fielding Decision	Nov 01
New Equipment Training (NET) - I MEF	Jan 02
II MEF	Apr 02
III MEF	Jul 02
MARFORRES	Nov 02
Fielding Begins	Jan 02
Initial Operational Capability	2nd Qtr FY02
Full Operating Capability	1st Qtr FY03

## APPENDIX C

## Listing of Technical Publications

PUBLICATION CONTROL NUMBER	TITLE	PUBLICATION TYPE
613-10225 (Rev A)	Micro Transceiver User Manual, AT-MX20T	COTS MANUAL
TS010-886	Breakout Box SAM-232-100, Black Box Corp.	COTS MANUAL
TM-10-8340-222-10	Tent, Modular Command Post Shelter	COTS MANUAL
SL1-53034	SNMPE3 Card User's Manual	COTS MANUAL
No Pub Number	Cable Tester TS030A, Black Box Corp.	COTS MANUAL
UM 644-0106.01	ML 4400 Keyboard, Cherry Corp.	COTS MANUAL
No Pub Number	CISCO 7206 Installation and Configuration Guide	COTS MANUAL
T0097.B	Modem User's Guide V.3600	COTS MANUAL
33050.B	10Base-2/10 Base-T Slide-In-Module User's Guide	COTS MANUAL
33049.F	10Base-T/10 Base-FL Slide-In-Module User's Guide	COTS MANUAL
33035.G	Manageable Media Conversion Center E-MCC-1600	COTS MANUAL
33051.A	Installing Optional Redundant Power Supply Module in E-MCC-1600 Chassis	COTS MANUAL
ADCP-50-305	Digital Patching User Manual EIA-232 & EIA-530, 9 <sup>th</sup> Edition	COTS MANUAL
No Pub Number	Compaq ProLiant 1600 Maintenance and Service Manual	COTS MANUAL
24001092-000 (Rev A)	CDI Module Operation and Maintenance Manual, CV-2048-M	COTS MANUAL
36025801 (Rev A)	Performance & Interface Specification & Installation Manual for KIV-19 Rack Mount Adapter	COTS MANUAL
TL-063-03	Inline Network Encryptor, KG-175 Operator Manual	COTS MANUAL
PAPE-1133-200	KVM Switch CS-142 User Manual	COTS MANUAL
SL-23131 (Rev N)	Uninterruptible Power Supply GXT-300RT-120 User's Manual	COTS MANUAL
No Pub Number	Catalyst 2900 Series XL Installation Guide	COTS MANUAL
No Pub Number	Quick Start: Catalyst 2900 Series XL Cabling and Setup Guide	COTS MANUAL
No Pub Number	CISCO IOS Desktop Switching Software Configuration Guide	COTS MANUAL
No Pub Number	Cisco IOS Desktop Switching Enterprise Edition Software Configuration Guide	COTS MANUAL
No Pub Number	Catalyst 2900 Series XL and Catalyst 3500 Series XL Cisco IOS Release 11.2(8.2)SA6	COTS MANUAL
2100M	HP LaserJet 2100M Printer User Guide	COTS MANUAL
No Pub number	Lambda HSB-5-3-OVP DC Power Supply Manual	COTS MANUAL
78134641	LCD Monitor, MultiSync 1525V User's Manual, NEC Technologies	COTS MANUAL
SL-53040 (Rev A)	Leibert Environmental Integrator User's Manual	COTS MANUAL
029163-004 2/00	Promina 400 Transmission Resource Controller (TRC) Xpress	COTS MANUAL

<b>PUBLICATION CONTROL NUMBER</b>	<b>TITLE</b>	<b>PUBLICATION TYPE</b>
	Module	
027935-004	Promina 400 TRC, Data Modules	COTS MANUAL
030415-001	Promina 400 TRC, HINTU Module	COTS MANUAL
027936-004	Promina 400 TRC, Port Extender 560 Module & Desktop Unit	COTS MANUAL
029838-003	Promina 400 TRC, Previously Released Equipment	COTS MANUAL
029014-005	Promina 400 TRC, Prime Voice Modules	COTS MANUAL
029761-002	Promina 400 TRC, Prime Voice Analog & Analog w/Compression Modules	COTS MANUAL
029556-002	Promina 400 TRC, PX3 Platform Guide Promina Release 2.x.2	COTS MANUAL
029205-002	Promina 400 TRC, Quad Basic Rate Interface Release 2.0	COTS MANUAL
027932-004	Promina 400 TRC, Trunk Modules	COTS MANUAL
027933-004	Promina 400 TRC, TRK-3 Module	COTS MANUAL
027934-005	Promina 400 TRC, Voice Modules	COTS MANUAL
027924-005	Promina 400 TRC, Alarms and Events	COTS MANUAL
027925-005	Promina 400 TRC, Operator Interface	COTS MANUAL
027937-004	Promina 400 TRC, SNMP Agents	COTS MANUAL
027956-004	Promina 400 TRC, Common Equipment	COTS MANUAL
027931-004	Promina 400 TRC, Hardware Description	COTS MANUAL
027927-004	Promina 400 TRC, Node Configuration	COTS MANUAL
030238-002	Promina 400 TRC, Addendum Release 2.x.4	COTS MANUAL
029837-002	Promina 400 TRC, Quick Reference Guide	COTS MANUAL

## APPENDIX D

## TDN Gateway Components Covered by Warranty

NOMENCLATURE/DESCRIPTION	QTY	NSN/ PART NUMBER
S-788/G Shelter, Modified	1	99002B3000-1
<b>UPS, Ruggedized 3.0</b>	3	99002A1056-1
UPS, Liebert, Rack Mount	3	GXT3000RT120
Battery, UPS 96V	3	6130-01-477-4459/GXT96VBATT
Battery Cable, 3 meter, 96V	3	108-00225-00
Management Module, SNMP	3	SNMPE3
<b>Monitor, 15" LCD</b>	2	LCD1525V
<b>Keyboard, Data Entry</b>	2	7025-01-440-5622/G84-4400
<b>Keyboard Video Monitor Switch</b>	2	CS142
<b>Processor, Ruggedized</b>	4	99002B8058-1
Processor, Proliant 1600R	4	123738-001
Processor, File Server, 3200	4	7025-01-464-7957/295643-B21
P3-550MHz Processor, Dual Option	4	124779-B21
16X Internal Multi-CDROM	4	5975-01-453-4839/MJ5.16SI
Microcircuit Memory, 256MB RAM	16	5962-01-461-9968/313616-B21
Hard Drive, 18.2 GB	16	127893-001
12/24 GB DDS-3 DAT Drive	4	295513-B22
3.5" Floppy Drive	4	99002B8016
PCMCIA Reader	4	64113-5
Video Card	4	G2MSDP8N
Intg Management Display	4	264377-B23
Power Supply	4	283697-B21
<b>Printer, HP LaserJet 2100M</b>	1	7025-01-440-5812/C4171A
<b>Media Converter (Configured)</b>	2	99002B8009-1
Chassis, Electrical-Electronic, 16 Slot	2	5975-01-465-9074/E-MCC-1600
100 Base T to 100 Base FX	4	C/E-100BTX-FX-04(SC)
Receiver-Transmitter Light Signal, 10 Base T to 10 Base FL	16	6030-01-465-9077/C/E-TBT-FRL-03
10 Base T to 10 Base 2	6	C/E-CX-TBT-04
Power Supply	2	6130-01-465-9076/E-MCC-PS
CCA, Management Module	2	5998-01-465-9119/E-MCC-MM
<b>Switch, Ethernet (Configured)</b>	2	99002B8010-1
<b>IP Router, (Configured)</b>	2	99002B8015-1
Computer Assembly, NPE 150, 1MB SRAM	2	7050-01-444-6097/NPE-150
Power Supply, Redundant	2	6130-01-452-1874/PWR-7200/2

NOMENCLATURE/DESCRIPTION	QTY	NSN/ PART NUMBER
Chassis, Electrical-Electronic, 6 Slot	2	5975-01-468-6034/02-2730073-1
NPE Memory Module	2	MEM-NPE-64MB
CCA, I/O Controller	2	5998-01-452-1871/C7200I/O
CCA, PCMCIA Flash Memory	2	5998-01-475-8784/MEM-I/O-FLC16M
CCA, 8 Port Ethernet (10 Base T) Module	2	5998-01-478-7246/PA-8E
CCA, 4 Port Serial Module	6	5998-01-468-0326/02-2730073-5
<b>Chassis, 8 Slot, KIV-7, W/Power Supply</b>	2	3018-1
<b>Rack, Electronic Junction, 2 Slot, KIV-19</b>	1	5975-01-452-7801/36025800
<b>Converter, NRZ/CDI</b>	6	97350040
Module. CV2048M	24	97350002-000
Power Supply and Chassis, CV2048M	6	97350004
<b>Liebert Site Integrator, 19SE</b>	1	141971G1
<b>Environmental Sensor</b>	1	99002B2167-1
<b>Environmental Sensor</b>	1	99002B2167-2
<b>Transmission Resource Controller (TRC), Promina 400 Assembly (Configured)</b>	1	99002B2097-1
Cabinet, Electrical Equipment, TRC Promina 400	1	5975-01-475-9381/PER400AR24A
Interface Card	1	9226
Interface Card	1	9227
Interface Card	1	9228
Front Card, PLM	1	PERPLM
Front Card, QBRI	1	9911A
Front Card, HSD-2	4	9071A
Front Card, SA-TRK	1	9955A
Module, PX3, 8 port	1	5141LHB-002
Module, TRC Ethernet	1	5105A
Module, QBRI	1	029220-001
PLMI, Shield	2	PERPLMIA
Dual, EIA-530 DCE	4	9079B
SA-530 I/F	1	9957B
Power Supply	2	027962
<b>TRC Promina 400 Assembly (Configured)</b>	1	99002B2097-2
Front Card, PX3	1	005141PL-002
Front Card, QBRI	1	9911A
Front Card, HSD-2	4	9071A
Front Card, SA-TRK	1	9955A
Module, QBRI	1	029220-001
Dual, EIA-530 DCE	4	9079B
SA-530 I/F	1	9957B

NOMENCLATURE/DESCRIPTION	QTY	NSN/ PART NUMBER
Power Supply	2	027962
<b>Data Patch Panel (Rollup quantities listed below)</b>	6	99002A1004
Panel, Blank	16	5975-01-217-0579/PMBF-1
Support, Electrical Card Holder, 18 Slot	6	5998-01-326-5792/PMCH-2
CCA, RS-530 Patch Module	68	PMM-616004(P/R)
CCA, RS-232 Patch Module	20	PMM-2(P/R)
Patch Cord, EIA-530 to EIA-232	1	PMP-602008
Patch Cord, RS-232, 1.5 ft.	10	PMPC-1R5
Patch Cord, EIA-232 to DB25, 10 ft.	1	PMCPC-M-10
Patch Cord, RS-530, 1.5 ft.	9	PMP-61R507RB
Patch Cord, EIA-530, 6 ft.	4	PMP-606007W
Patch Cord, RS-530, 1.5 ft.	25	PMP-61R507
Null Patch Cord, RS-530	4	PMP-602005
Loopback Plug	1	CX11230
Loopback Plug Kit	2	PMLP-KIT-A
Loopback Plug Kit	2	PMLP-KIT-B
Test Module, RS-530	4	PMM-636003 (P/R)
Cords, Tip Ring	1	PMP-602900
Cable Assembly, Special Purpose	40	5995-01-446-3911/PM-MM-PC-2
<b>Loop Patch Panel (Rollup quantities listed below)</b>	6	99002A1020
Loop Patch Panel	6	JC2/48M-GOVT
Cord Assembly, Electric	8	5995-00-998-0924/ PJ714
<b>Coax Patch Panel</b>	1	99002B9007-1
Patch Cord, SubTwinax, 2 ft.	41	PTWM-24-78
Adapter, Test Loop Plug	2	6625-01-237-5341/LPTWM2TP-78
<b>Group Patch Panel</b>	1	99002B1007-1
Sub-Twinax Patch Panel	1	155-0990
Jack, Telephone, Single Sub-Twinax	24	5935-01-165-2928/979270-1
Jack, Normal Thru Twinax	62	J158
<b>Encryption-Decryption Equipment, Taclane</b>	1	5810-01-463-0133/0N649470-1
<b>Power Supply, 5VDC, Lambda</b>	1	6130-01-036-7660/HSB-5-3-OVP
<b>Converter, Optical MD1272/G</b>	2	5895-01-186-3665/A3099781
<b>Modem, V.3600, Motorola</b>	1	6209548200010
<b>Cable Assembly, Interface Device RS-232 to RS 530</b>	4	4920-01-480-0613/ IC237A
<b>Cable Tester, Ethernet</b>	1	TS030A
<b>Adapter, Cable Breakout Box</b>	1	6625-01-389-0385/TS010A
<b>Receiver-Transmitter Light Signal, AUI to 10BaseT</b>	1	6030-01-478-5626/AT-MX20T-05

NOMENCLATURE/DESCRIPTION	QTY	NSN/ PART NUMBER
Telephone	2	Trimline 230



## APPENDIX E

## TDN Gateway IETM Configuration Management Plan

1. All recommended changes to TDN publications should be submitted to the Life Cycle Management Center (LCMC) Code 852, 814 Radford Boulevard, Albany, GA 31704-0320 per the procedures outlined in MCO P5215.17\_. This includes recommended changes to IETMs, COTS manuals, Software Users Manuals (SUMs), and all other manuals included on the IETM CD-ROM. Information copies of NAVMC form 10772 will be provided to MARCORSYSCOM (C4ISRComm-R), TDN Logistician, MCB Quantico, VA 22134-5010.
2. During the annual review of IETMs, the WSM (Code 847-3), Albany, GA, shall ensure the validity of all manuals on the IETM CD-ROM. This review includes COTS manuals, other services technical manuals (Army, Air Force, Navy), and the SUMs. If new manuals are required to support this equipment the WSM will coordinate with MARCORSYSCOM (Code PSD) for the acquisition of the new publication and having it added to the Marine Corps Publication and Distribution System (MCPDS). Prior to requesting the publication be incorporated into the IETM CD-ROM, the WSM will notify LCMC (Code 852) of the requirement.
3. MCTSSA is not responsible for requests from Marine Operating Forces to make changes to the SUM. MCTSSA will direct the user to submit changes via NAVMC form 10772 to LCMC (Code 852) who will enter the change request into the NAVMC form 10772 tracking program and provide a copy to the WSM (Code 847-3). The WSM (Code 847-3) will then coordinate the resolution of the NAVMC form 10772 with LCMC (Code 852) and MCTSSA, Box 555171, CSD, TDN Project Officer, Camp Pendleton, CA 92055-5171. If the SUM requires updating, MCTSSA will author a revision document that will be sent to LCMC (Code 852), for inclusion in the next revision of the IETM CD-ROM.
4. If a change to the IETM CD-ROM is determined at any level to be such a critical nature that it is considered an emergency, the following procedures will be followed:
  - a. LCMC (Code 852), will receive the recommended change via the electronic NAVMC form 10772 and coordinate with the appropriate WSM.
  - b. If the change is deemed critical and requires immediate action to protect personnel and/or equipment, the WSM will follow established policy in issuing a WSM Alert. Once the WSM Alert is issued to the Marine Operating Forces and the equipment is deadlined (if needed), the WSM will follow up this action by either coordinating with LCMC (Code 852) for a publication change or Modification/Supply/Technical Instruction (as appropriate).
  - c. The changed manual or new instruction will be included in the next revision of the IETM.

5. When inserting changes to the IETM CD-ROM, file names of the documents contained on the CD will not change throughout the lifecycle of the IETM, no matter how many changes take place. Changes or revised documents will be indicated on the first page of the document in the file.

## APPENDIX F

## Listing of Supporting Consumables

NOMENCLATURE	MODEL	U/I
Alcohol, Isopropyl		BT
Cloth, Cleaning (5 lb.)		BD
Detergent (5 lb.)		BX
Floppy Diskettes		BX
Lamp, Incandescent	A3151862	EA
Lamp, Incandescent Red		EA
Cartridge, Printer	C4096A	EA
Tape (Back-up Drive)	DDS-2	EA
Tape, Cleaning (Tape Drive)	HP92283K	EA
Primer	MILS22473/GR-T-R	EA
Sealing Compound	MILS22473/GR-A	BT
Sealing Compound	MILS22473/GR-C	BT
Sealing Compound	MILS22473/GR-BLUE	BT
Sealing Compound	MILS22473/GR-H	BT



## APPENDIX G

## Packaging, Handling, Storage, and Transportation of CCI Equipment

1. The following is An extract of Section 535 of CMS-21A, Communications Security Material System Policy and Procedures Manual for the Electronic Key Management System (EKMS) for Tiers 1 and 2. It is provided here for familiarization only. Refer to the most current edition of CMS-1A or CMS-21A for current policy and procedures. CMS-1A or CMS-21A is the authority for the Navy and Marine Corps regarding packaging, handling, storage and transportation of CCI equipment.

2. Controlled Cryptographic Item (CCI)

a. Definition:

A secure telecommunications or information handling equipment, or associated cryptographic component, which is unclassified but controlled. Designated items will bear the designation Controlled Cryptographic Item or CCI.

b. Accountability:

CCI is centrally accountable to DCMS by serial number (AL 1) or quantity (AL 2).

c. General Access Requirements:

(1) A security clearance is not required for access to unkeyed CCI. Normally, access must be restricted to U.S. citizens whose duties require such access.

(2) Unkeyed CCI and/or CCI keyed with unclassified key marked or designated CRYPTO, must be stored in a manner that affords protection against pilferage, theft, sabotage, or tampering, and ensures that access and accounting integrity are maintained.

d. Access Requirements for Resident Aliens. Resident aliens who are U.S. Government employees, U.S. Government contractor employees, or National Guard, active duty, or reserve members of the U.S. Armed Forces may be granted access to CCI provided their duties require access.

e. Access Requirements for Foreign Nationals. Non-U.S. citizens who are employed by the U.S. Government at foreign locations where there is a significant U.S. military presence (two or more military bases) may handle CCI material in connection with warehouse functions provided they are under the direct supervision of an individual who has been granted access to CCI material.

(1) Access to Unkeyed CCI: Access may be granted to Foreign Nationals under the following conditions:

(a) In conjunction with building maintenance, custodial duties, or other operational responsibilities that were performed by unescorted personnel in the area prior to the installation of the CCI.

(b) The CCI is installed within a U.S. controlled or combined facility with a permanent U.S. presence, as opposed to a host nation facility.

(c) Command security authority has determined that the risk of tampering with the CCI, which could result in compromise of U.S. classified or sensitive classified information, is acceptable in light of the local threat, perceived vulnerability, and the sensitivity of the information being protected as indicated by its classification, special security control, and intelligence life.

(d) The system doctrine for the CCI does not specifically prohibit such access.

(2) Access to Keyed CCI: The access requirements listed above for unkeyed CCI also apply to keyed CCI with the following additional restrictions:

(a) The non-U.S. citizens are civilian employees of the U.S. Government and are assigned to a combined facility.

(b) The non-U.S. citizens hold a clearance at least equal to the highest level of the keying material or information being processed.

(c) The CCI material remains U.S. property and a U.S. citizen is responsible for it. The presence of such installed CCIs must be verified at least monthly and the verification documented and retained in accordance with local command policy.

(d) The communications to be protected are determined to be essential to the support of a U.S. or combined operation.

(e) U.S. users communicating with such terminals are made aware of the non-U.S. citizen status of the CCI user.

NOTE: 1. Waivers to permit unescorted access by non-U.S. citizens to installed CCIs under the conditions listed above must be submitted to DCMS//20//.

2. Non-U.S. citizens in countries listed in the Attorney General's Criteria Country list may not be granted access to installed CCI equipment without approval from DIRNSA/I11//; submit requests via the Chain of Command to DCMS//20//.

f. Keying CCI:

(1) Only properly cleared and designated U.S. citizens are authorized to key CCI with classified U.S. key. Waivers of this policy must be authorized by DCMS//20//.

Non-U.S. personnel are authorized to key CCI using only Allied key or unclassified U.S. key.

g. Classification of CCI When Keyed:

When keyed, CCI assumes the classification of the keying material it contains, and must be handled in accordance with the control and safeguarding requirements for classified keying material described in this manual.

h. Installing CCI in a Foreign Country:

When there is an operational necessity to install and operate a CCI in a foreign country at a facility that is either unmanned or manned entirely by non-U.S. citizens, the installation must be approved, in advance, by DCMS//20//.

(1) In addition to the requirements listed above, special security measures will be required (e.g., constructing vault areas, storing CCI material in approved security containers, installing locking bars on equipment racks, installing alarm systems) to prevent unauthorized access to the CCI by non-U.S. citizens.

(2) The installation of the CCI must be accomplished and controlled by U.S. citizens who shall verify the presence of the CCI equipment at regular intervals.

i. Moving CCI to a Sensitive Environment. CCI material should not be moved from an environment where the risk of tampering by foreign nationals is acceptable, to a more sensitive environment where the risk of tampering by foreign nationals is not acceptable.

(1) When operational requirements necessitate moving CCI to a more sensitive environment, the command must send a message to DCMS//20// requesting authorization to move the material.

(2) Before moving the CCI, it must be examined for signs of tampering by qualified COMSEC maintenance personnel.

(3) Report any evidence or suspicion of tampering to DIRNSA//I413// as a COMSEC incident in accordance with Chapter 9. The affected CCI equipment shall be removed from operational use pending disposition instructions from DIRNSA.

j. Transporting Keyed/Unkeyed CCI:

(1) CCI must not be shipped in a keyed condition unless removing the key is impossible.

(2) Unkeyed CCI may be shipped/transported by any means delineated below.

k. Methods of Shipping CCI. CCI equipment must be shipped only to authorized activities using any of the following methods:

(1) Authorized U.S. Government department, service, or agency courier (e.g., Navy Supply System).

(2) Authorized U.S. Government Contractor/Company or U.S. citizen courier.

(3) U.S. Postal Service Registered mail or express mail, provided the material does not at any time pass out of U.S. postal control, pass through a foreign postal system, pass through any foreign inspection, or otherwise fall under the control of unescorted foreign nationals. When using express mail, the shipper must obtain assurance from U.S. Postal Service authorities that the material will receive continuous electronic or manual tracking to the point of delivery. A recipient's signature must be obtained. Material must be introduced into the postal system "across-the-counter" at a U.S. Postal Service Facility; postal drop boxes must not be used.

NOTE: 1. There are certain restrictions governing the size and weight of packages that can be shipped via registered mail. Prior to shipping the CCI, check with the postal service to determine whether the shipment qualifies.

2. First, fourth, certified, insured, and parcel post are not authorized methods of shipping CCI equipment.

(4) Commercial carriers (non-military aircraft) may be used to transport CCI (includes CCI being transported in conjunction with Foreign Military Sales) within the U.S., its territories, and possessions, providing the carrier warrants in writing the following:

(a) Is a firm incorporated in the U.S. that provides door-to-door service?

(b) Guarantees delivery within a reasonable number of days based on the distance to be traveled.

(c) Possesses a means of tracking individual packages within its system to the extent that should a package become lost, the carrier can, within 24 hours following notification, provide information regarding the last known location of the package(s).

(d) Guarantees the integrity of the vehicle's contents at all times.

(e) Guarantees that the package will be stored in a security cage should it become necessary for the carrier to make a prolonged stop at a carrier terminal.



(f) Utilizes a signature/tally record (e.g., a carrier's local signature/tally form or the DD Form 1907 or Form AC-10) that accurately reflects a continuous chain of accountability and custody by each individual who assumes responsibility for the shipment while it is in transit;

OR

1 Utilizes an electronic tracking system that reflects a chain of accountability and custody similar to that provided by a manually prepared signature/tally record.

2 Ensures positive identification of the actual recipient of the material at the final destination.

3 Uses a hard-copy printout that serves as proof of service; the printout must reflect those points, during transit, where electronic tracking of the package/shipment occurred.

(5) U.S. military, military-contractor, or private air service (e.g., AMC, LOGAIR, QUICKTRANS), provided the carrier satisfies the requirements identified above for commercial non-aircraft carriers.

(6) U.S. Diplomatic Courier Service.

(7) DCS outside CONUS, when no other methods of secure transportation is available. Prior authorization must be obtained from DCS before any unkeyed CCI's are introduced into the DCS system.

(8) Commercial passenger aircraft may be used within the U. S., its territories, and possessions. Transport of CCI material outside the U.S., its territories, and possessions on a U.S. flag or any foreign-owned, controlled, or chartered aircraft, is strongly discouraged because of the threat of terrorists and the lack of U.S. control.

NOTE: Requirements/restrictions for shipping CCI on commercial aircraft are detailed in paragraph I.

(9) Non-U.S. citizens who are employed by the U.S. Government at foreign locations where there is a significant U.S. military presence (two or more military bases) may transport CCI material, provided there is a signature record that provides continuous accountability for custody of the shipment from the time of pick-up to arrival at the final destination.

NOTE: A U.S. citizen must accompany the foreign driver carrying the material; or the material must be contained in a closed vehicle or shipping container (e.g., CONEX, DROMEDARY, or similar authorized container) which is locked with a high security lock and contains a shipping seal that will prevent undetected access to the enclosed material.

1. Requirements and Restrictions for Transporting CCI on Commercial Aircraft:

(1) The container(s) and content(s) may be subject to certain security inspections, including x-ray, by airport personnel. Inspections are permissible, but only in the presence of the courier.

(2) Inspection of CCI material must be restricted to exterior examination only and conducted in the presence of the courier. To preclude unnecessary inspections by airport personnel, couriers should carry current orders, letters, and ID cards identifying them as designated couriers.

(3) CCI material must be stored in the cabin of the aircraft where the courier can maintain continuous control of the material.

(4) When the size of the CCI shipment is too large for storage in the cabin of the aircraft, the entire shipment must be packaged in a suitable container, which is secured and sealed in such a manner so that any unauthorized access to the enclosed CCI can be detected by the courier. The CCI shipment may then be shipped as checked baggage, provided the LIFO procedure is coordinated with the carrier.

m. Storage of CCI: Unkeyed CCI and/or CCI keyed with unclassified key marked or designated CRYPTO, must be stored in a manner that affords protection against pilferage, theft, sabotage, or tampering, and ensures that access and accounting integrity are maintained.

n. Packaging CCI: Package unkeyed CCI for shipment in a manner that will allow for tamper detection and prevent damage while in transit.

(1) In addition to the information required on the packaging label, include the office code or duty position title of the individual who is designated to accept custody of the CCI equipment to ensure proper delivery. Do not use the name of an individual.

(2) The shipping document must also contain an emergency telephone number(s) for the intended recipient in the event delivery is made after normal working hours.

o. Notification to Intended Recipient. Regardless of the method used to transport CCI, the transferring command must, within 24 hours of shipping, notify the intended recipient of the method of transportation and a list of CCI(s) that have been shipped.

p. Shipments not Received

(1) If a shipment of CCI equipment has not been received within five working days after the expected delivery date, contact the originator of the shipment immediately.

(2) If the location of the shipment cannot be determined, tracer action must then be initiated. The material shall be assumed to be lost and the incident must be reported to DIRNSA FT GEORGE G MEADE MD//I413/Y265// in accordance with Chapter 9.

q. Reportable Incidents:

(1) Lost shipments, shipments that show evidence of possible tampering, and unauthorized access to CCI equipment must be reported to DIRNSA//I413/Y265//, info DCMS//20//.

(2) All other incidents involving improper shipping or handling of CCI equipment must be reported to DCMS//20//, info DIRNSA//I413//. If a commercial carrier is involved, include the name(s) of the carrier(s).



## APPENDIX H

## Other Support Equipment

NOMENCLATURE	P/N	NSN	QTY	TAMCN
Mobile Electric Power Distribution System *	002221SL87	6110-01-272-6953	1	B0600
Air Conditioner, Vertical, Compact,	F18T-MPI	4120-01-325-7062	2	B0012
H-HMMWV, M1097-A1		2320-01-346-9317	2	D0187
Skid Mounting Assy, Remote, Air Conditioning,	SM-V18	4120-00-327-5035	2	B2004
Modular Command Post System (MCPS) Tent		8340-01-323-2454	1	N/A
Bootwall Assembly		8340-01-364-4497	1	N/A
Fire Extinguisher	35040	6830-01-324-2179	2	N/A
First Aid Kit	11677011	6545-00-922-1200	2	K4344
Kit, Snake Bite	Y19201	6545-01-281-1237	1	N/A
Grounding Rod, Section	583GTEKIT		1	N/A
Grounding Rod, Middle	S583DT		2	N/A
Ground Rod, End	S583ST		1	N/A
Grounding Strap	GS5872GD		3	N/A
Grounding Strap	GS5824GD		3	N/A
Slide Hammer, Grounding	13226E7741	5120-01-013-1676	1	N/A
Bag, Storage	86-2734992-1	8105-01-354-3949	1	N/A
Padlock, Combination	7849937P001	5340-00-285-6523	1	N/A
Flashlight	13394025		1	N/A
Matting, Floor	600160-02	7220-01-057-1897	1	N/A
Single Bit Ax	GS-1		1	N/A
Pan, Dust	0240612		1	N/A
Brush, Dust	0260080		1	N/A
Clock, Digital	TBD-RJ6		1	N/A
Stool, Adjustable	XF185233BK		2	N/A
Tool Kit, Hand	99002B8059-1		1	N/A
Socket, 7/16 Inch	B107-1	5120-00-239-0016	1	N/A
Socket, 1/2 Inch	A-A-1407	5120-00-189-8610	1	N/A
Handle, Socket	SR1-2652	5120-00-778-0583	1	N/A
Wrench, 7/16 Inch	66-128	5120-01-287-5984	1	N/A
Screwdriver, Cross Tip #1	B107.15TY2DEASZ1	5120-00-240-8716	1	N/A
Screwdriver, Cross Tip # 2	10510985	5120-00-234-8913	1	N/A

NOMENCLATURE	P/N	NSN	QTY	TAMCN
Screwdriver, Flat Tip		5120-00-236-2127	1	N/A
ESD Wriststrap	CP407/C6-L	4240-01-165-8865	1	N/A
Pouch, Mechanics Tool	50J8016	5140-00-329-4306	1	N/A
Power Cable, (MEPDS) 50 ft.	A1-29798D-1		2	N/A
Power Stub, Cable Assembly	8735533-10	5995-01-382-7390		N/A
Power Cable, ECU, 20 ft.	09-2750825-1X3		1	N/A
Cable Mounting Reel	RC-405/TR	8130-00-711-0537	1	N/A
Lifting Slings				
Extension Cords				

\* Denotes UURI

## APPENDIX I

## Listing of Acronyms

ACC	Area Control Center
ADUA	Administrative Directory User Agent
AFATDS	Advanced Field Artillery Tactical Data System
ATACC	Advanced Tactical Air Command Control
AUTODIN	Automated Digital Network
BIT	Built-in Test
BITE	Built-in Test Equipment
C <sup>4</sup> I	Command, Control, Communications, Computers and Intelligence
CBT	Computer Based Training
CCA	Circuit Card Assembly
CCI	Controlled Cryptographic Item
CCSS	Command and Control Systems School
CFE	Contractor Furnished Equipment
CG	Commanding General
CLS	Contractor Logistics Support
CM	Configuration Management
COMMARCORLOGBASES	Commander, Marine Corps Logistics Bases
COMMARCORSYSCOM	Commander, Marine Corps Systems Command
COMSEC	Communications Security
CONUS	Continental United States
COTS	Commercial-off-the-Shelf
CRLCMP	Computer Resources Life Cycle Management Plan
CRYPTO	Cryptographic
DAT	Digital Audio Tape
DCMS	Digital Communications Management System
DCS	Defense Courier Service
DHCP	Dynamic Host Control Protocol
DIRNSA	Director, National Security Agency
DISA	Defense Information Systems Agency
DL	Distance Learning
DMS	Defense Message System
DNS	Domain Name Server
DoD	Department of Defense
DSA	Directory System Agent
DSSC	Direct Support Supply Center

DSVT	Digital Subscriber Voice Terminal
DTC	Digital Technical Control
DUA	Directory User Agent
EAF	Equipment Allowance File
ECU	Environmental Control Unit
ELMACO	Electronics Maintenance Company
EPLRS	Enhanced Position Location Reporting System
ESH	Environmental, Safety and Health
FMF	Fleet Marine Force
FOT&E	Follow-on Operational Test & Evaluation
FSSG	Force Service Support Group
GD-CS	General Dynamics Communication Systems
GENSER	General Service
GFM	Government Furnished Materiel
GOTS	Government-off-the-Shelf
H-HMMWV	Heavy-variant High Mobility Multipurpose Wheeled Vehicle
HP	Hewitt Packard
Hz	Hertz
IAS	Intelligence Analysis System
ICS	Interim Contractor Support
ID	Item Designator
IDASC	Improved Direct Air Support Central
IETM	Interactive Electronic Technical Manuals
IFSAS	Initial Fire Support Automation System
INE	Inline Network Encryptor
IOC	Initial Operating Capability
I&KP	Instructor & Key Personnel
IP	Internet Protocol
ISP	INTERNET Service Provider
JTF	Joint Task Force
JWICS	Joint World-Wide Intelligence Communications Systems
LAN	Local Area Network
LED	Loop Encryption Device
LIFO	Last-In First-Out
LMIS	Logistics Management Information System
LMS	Lightweight Multipurpose Shelter



LO	Lubrication Order
LRU	Line Replaceable Unit
LTI	Limited Technical Inspection
MAGTF	Marine Air-Ground Task Force
MARCORLOGBASES	Marine Corps Logistics Bases
MARCORSYSCOM	Marine Corps Systems Command
MARFORRES	Marine Forces Reserve
MARFORPAC	Marine Forces Pacific
MARFORLANT	Marine Forces Atlantic
MCBul	Marine Corps Bulletin
MCCDC	Marine Corps Combat Development Command
MCCES	Marine Corps Communications-Electronics School
MCCOS	Marine Corps Communications Officers School
MCGERR	Marine Corps Ground Equipment Resource Reporting
MCHS	Marine Corps Hardware Suite
MCO	Marine Corps Order
MCPDS	Marine Corps Publication Distribution System
MCPS	Modular Command Post
MSC	Major Subordinate Command
MCSSC2	Marine Combat Service Support Command and Control System
MCTSSA	Marine Corps Tactical System Support Activity
MEF	Marine Expeditionary Force
MEU	Marine Expeditionary Unit
MFI	Multifunction Interpreter
MFT	Materiel Fielding Team
MILOG	Marine Integrated Logistics System
MILSTRIP	Military Standard Requisitioning and Issue Procedures
MIPS	Marine Integrated Personnel System
MISSI	Multi-Level Information System Security Initiative
MLA	Mail List Agent
MLS	Multi-Level Security
MOS	Military Occupational Specialty
MSC	Major Subordinate Command
MTA	Message Transfer Agent
MTP	Manpower and Training Plan
MTWS	MAGTF Tactical Warfare Simulation
MWS	Management Workstation
NAVMC	Navy and Marine Cops
NDI	Non-Developmental Item
NES	Network Encryption System
NET	New Equipment Training

NIPRNET	Non-Secure Internet Protocol Router Network
NMS	Network Management System
NSA	National Security Agency
NSN	National Stock Number
O&MMC	Operation and Maintenance Marine Corps
ORD	Operational Requirements Document
OS	Operating System
PDF	Portable Document Format
PDS	Practices Dangerous to Security
PHST	Packaging, Handling, Storage, and Transportation
PLMS	Publication Locator Management System
PLRS	Position Location Reporting System
PM	Program Manager
POA&M	Plan of Action & Milestones
POC	Point of Contact
POL	Petroleum, Oil, and Lubricants
PUA	Profiling User Agent
PS	Program Sets
PQDR	Product Quality Deficiency Report
SAC	Stores Account Code
SATCOM	Satellite Communications
SBU	Sensitive-but-Unclassified
SCI	Secure Compartmented Information
SEP	Signal Entry Panels
SIPRNET	Secure Internet Protocol Router Network
SNMP	Simple Network Management Protocol
SPEED	System Planning Engineering Evaluation Device
STE	Secure Terminal Equipment
T/E	Table of Equipment
T/O	Table of Organization
TAMCN	Table of Authorized Materiel Control Number
TBD	To Be Determined
TCO	Tactical Combat Operations
TDN	Tactical Data Network
TDS	Tactical Data System
TED	Trunk Encryption Device
TM	Technical Manual
TMDE	Test, Measurement and Diagnostic Equipment
TMO	Traffic Management Office
TP	Technical Publication

TR	Technical Representative
TS	Top Secret
UC	Unit Cost
UI	Unit of Issue
ULSS	User's Logistics Support Summary
UPS	Uninterruptible Power Supply
USMC	United States Marine Corps
UURI	Using Unit Responsible Item
VAC	Volts AC
WAN	Wide Area Network
WSM	Weapon System Manager
WSSA	Weapons System Support Activity